

What is Claimed:

1. A method for continuously treating unsorted municipal waste to produce a high quality, recycled humus, comprising the steps of:

continuously transporting the waste to a liquid containing soaking tank and, en route, magnetically removing ferrous parts and screening out coarse parts beyond a predefined size, and depositing the remainder of the waste in a liquid containing soaking tank to form a slurry, while continuously skimming off floating matter and removing settled out heavy matter;

continuously subjecting dried slurry to thermomechanical treatment involving high mechanical pressure and high frictional and warping forces, so that the temperature thereof is increased substantially and the microorganism content thereof is changed, rendering the resultant material hygienic, practically germ-free, neutral in odor and loose, springy and full in structure;

heaping the resultant material into piles for aerobic composting.

2. The method of claim 1, wherein a portion of said slurry is periodically provided to a digestion tank to produce biogas used to, one of: fuel a generator of electric power used in the present method; and fuel a burner utilized in the present method.

3. The method of claim 2, wherein the biogas is used in an oven which burns one of the extracted coarse parts and the floating matter, the exhaust gases from this burning being sent to a heat exchanger, which extracts their heat and provides it at another part of the process.

4. The method of claim 3, wherein prior to the subjecting step, the slurry is dewatered in a drier supplied with heat from said heat exchanger.

5. The method of claim 2, wherein putrefied suspension from digestion tank is combined with the slurry prior to said subjecting step.

1 6. The method of claim 1, wherein prior to said subjecting step, said slurry
2 is mechanically dewatered, with a major part of the extracted water being returned to the soaking
3 tank.

1 7. The method of claim 1, wherein prior to said subjecting step, vegetable
2 matter is combined with the dried slurry.

1 8. The method of claim 1, wherein the subjecting step is performed with a
2 twin-screw extruder.

1 9. The method of claim 8, wherein the extruder has self-clamping reversible
2 screws and utilizes thrust reversal of mass flow.

1 10. The method of claim 1, wherein one pile is covered with breathable cover
2 sheeting and is subjected to forced ventilation, the material being converted into high-quality
3 recycled humus of Maturity Class V within a retention time of two to three weeks, without
4 mechanical turnover of the pile and without being an odor nuisance to the environment.